

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
TerreStar Corporation Request for Temporary)	WT Docket No. 16-290
Waiver of Substantial Service Requirements)	
for 1.4 GHz Licenses)	

ORDER

Adopted: October 10, 2017

Released: October 10, 2017

By the Chief, Mobility Division, Wireless Telecommunications Bureau:

I. INTRODUCTION

1. In this Order, we deny the Waiver Request filed by TerreStar Corporation (TerreStar) regarding its licenses in the paired 1392-1395 MHz and 1432-1435 MHz bands and unpaired 1390-1392 MHz band (collectively, the 1.4 GHz Band).¹ TerreStar asks the Commission to waive, until April 23, 2020, the requirement in Section 27.14(a) of the Commission's rules² that it demonstrate substantial service with respect to all of its 1.4 GHz licenses by April 23, 2017. For the reasons discussed below, we deny TerreStar's request.

II. BACKGROUND

2. *1.4 GHz Band.* In 2002, the Commission allocated certain spectrum bands, including spectrum in the 1.4 GHz Band, for non-Government use, thereby effectuating the transfer of spectrum from the Federal Government pursuant to statutory requirements.³ The Commission subsequently established fixed and mobile allocations for the 1.4 GHz Band and adopted service rules.⁴ In taking this action, the Commission decided to license operations in the 1.4 GHz Band as a Part 27 Wireless Communications Service, thereby applying the basic technologically neutral regulatory and licensing framework of Part 27 to these operations with the goal, *inter alia*, of allowing 1.4 GHz Band licensees to

¹ Request of TerreStar Corporation for Temporary Waiver of Substantial Service Requirements, WT Docket No. 16-290 (filed Aug. 12, 2016) (Waiver Request). See Appendix for applicable call signs and associated applications.

² 47 CFR § 27.14(a).

³ See *Reallocation of the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz Government Transfer Bands, et al.*, Report and Order and Memorandum Opinion and Order, 17 FCC Rcd 368 (2002) (allocating the 1.4 GHz Band to Fixed and Mobile Services (with the exception of aeronautical mobile) on a primary basis).

⁴ See *id.* See also *Amendments to Parts 1, 2, 27 and 90 of the Commission's Rules to License Services in the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz Government Transfer Bands*, Report and Order, 17 FCC Rcd 9980 (2002) (*1.4 GHz Service Rules Order*) (adopting 1.4 GHz service rules).

accommodate a variety of business plans while affording adjacent users sufficient protection from interference.⁵

3. In 2007, the Commission auctioned 64 licenses in the 1.4 GHz band,⁶ comprised of 52 Major Economic Area (MEA) licenses in the 1390-1392 MHz segment⁷ and 12 paired Economic Area Grouping (EAG) licenses in the 1392-1395 MHz and 1432-1435 MHz segments.⁸ The rules for this service provide, *inter alia*, that such licenses will be forfeited if the licensee does not successfully “make a showing of ‘substantial service’ in the[] license area within the prescribed license term set forth in § 27.13” and thereby fails to meet the performance requirement for maintaining a license in the 1.4 GHz Band.⁹ TerreStar currently holds all 64 1.4 GHz Band licenses after acquisitions of licenses from EchoStar in 2007 and CCTV in 2008, and the initial license term for each license ended on April 23, 2017.¹⁰

4. *TerreStar’s Waiver Request.* Pursuant to Sections 1.3 and 1.925(b)(3)(ii), TerreStar seeks a three-year waiver of its substantial service performance requirement, until April 23, 2020, in order to enable commercial wireless medical telemetry on its 1.4 GHz Band spectrum nationwide. Specifically, TerreStar argues that it could not construct its planned WiMAX network given the threat of interference such a system would pose to Wireless Medical Telemetry Service (WMTS) operations¹¹ and other entities in frequency bands adjacent to its 1.4 GHz spectrum. Instead, TerreStar now plans to supplement existing medical telemetry services within health care facilities by offering such services over its unpaired band (1390-1392 MHz) and Upper A and B Blocks (1432-1435 MHz), and to establish new medical telemetry services in the Lower A and B Blocks (1392-1395 MHz).¹² TerreStar states that it intends to use the Lower A and B Blocks for WMTS research and development; it proposes a potential mobile medical telemetry service to be provided outside of healthcare facilities, and plans to implement a national registration and frequency coordination framework for WMTS equipment to operate in the 1.4 GHz

⁵ *1.4 GHz Service Rules Order*, 17 FCC Rcd at 9998, para. 40 (noting that the rules adopted for the 1.4 GHz Band, while containing certain technical restrictions, remain consistent with the Commission’s “goal of providing the licensees with optimal flexibility and will accommodate a variety of business plans”).

⁶ *Auction of 1.4 GHz Band Licenses Closes: Winning Bidders Announced for Auction No. 69*, Public Notice, 22 FCC Rcd 4714 (WTB 2007).

⁷ See *1.4 GHz Service Rules Order*, 17 FCC Rcd at 9989-90, paras. 14-15 (explaining that smaller economic areas would help to alleviate spectrum access concerns of user with smaller and/or more localized spectrum needs).

⁸ See *id.* at 9990, paras. 16-17 (explaining that larger geographic areas like EAGs would, among other benefits, facilitate flexibility for nascent operations to allocate resources according to demand, permitting them to rollout service quickly).

⁹ 47 CFR § 27.14(a); see also *id.* §§ 27.13(c)-(d) (specifying a license term of no more than ten years for the subject licenses). In setting out this performance requirement, Section 27.14(a) defines “substantial service” as “service which is sound, favorable and substantially above a level of mediocre service which just might minimally warrant renewal.” *Id.* § 27.14(a); see also *1.4 GHz Service Rules Order*, 17 FCC Rcd at 10011, para. 75 (explaining the rationale underlying the substantial performance showing as an approach that “furthers the public interest and is consistent with our renewal requirements, [...] ensuring efficient use of the spectrum, and expeditious service to the public”).

¹⁰ See *Wireless Telecommunications Bureau Grants 1.4 GHz Band Licenses*, Public Notice, 22 FCC Rcd 7537 (WTB 2007) (granting ten-year license terms on April 23, 2007).

¹¹ WMTS systems operate on the 608–614, 1395–1400, and 1427–1432 MHz frequencies and are used for remote monitoring of patients’ health in medical facilities. Wireless medical telemetry systems include devices to measure patients’ vital signs and other important health parameters (e.g., pulse and respiration rates) and devices that transport the data via a radio link to a remote location, such as a nurses’ station, equipped with a specialized radio receiver.

¹² Waiver Request at 7.

spectrum similar to that used today in the dedicated WMTS bands.¹³ As an alternative to requesting a waiver of Section 27.14(a) pursuant to Sections 1.3 and 1.925(b)(ii), TerreStar also proposes relief under Section 1.946(e) by requesting a thirty-six month extension of the April 23, 2017 substantial service deadline.¹⁴

5. *Comments and Replies.* After the Wireless Telecommunications Bureau (Bureau) sought comment on TerreStar's Waiver Request, the American Society for Health Care Engineering (ASHE),¹⁵ and WMTS device manufacturers GE Healthcare Technologies (GE Healthcare) and Philips Healthcare commented on TerreStar's Waiver Request.¹⁶ Although the WMTS device manufacturers generally supported the Waiver Request,¹⁷ ASHE initially voiced several concerns and asked that the Commission instead grant a more limited waiver.¹⁸ After TerreStar provided additional clarification in its Reply Comments,¹⁹ ASHE filed an *ex parte* urging the Bureau to grant the full relief requested by TerreStar.²⁰

III. DISCUSSION

6. Licensees may request a waiver of the performance requirement under Section 1.925(b)(3) or Section 1.3 of the Commission's rules, or an extension pursuant to Section 1.946(e).²¹ Section 1.925(b)(3) of the Commission's rules states that the Commission may grant a waiver when either

¹³ *Id.* at 19.

¹⁴ *Id.* at 13 n.28.

¹⁵ ASHE was designated by the Bureau to serve as the frequency coordinator for WMTS. *Amendments of Parts 2 and 95 of the Commission's Rules to Create a Wireless Medical Telemetry Service*, Order, 16 FCC Rcd 4543 (WTB PSPWD 2001).

¹⁶ See *Wireless Telecommunications Bureau Seeks Comment Regarding TerreStar Corporation's Request for Relief of Certain 1.4 GHz Construction Requirements*, Public Notice, 31 FCC Rcd 9798 (WTB 2016) (*TerreStar Public Notice*). Comments and reply comments were due October 4, 2016, and October 14, 2016, respectively. See *id.*

¹⁷ See GE Healthcare Comments at 1; Philips Healthcare Comments at 1.

¹⁸ ASHE Comments at 2-3 (positing that TerreStar's plan would create a "dual licensing system" for wireless medical telemetry users and questioning whether the possibility of TerreStar spectrum being leased to WMTS manufacturers in a given city or larger geographic area would create a "monopoly authority" over access to spectrum for any particular health care facility).

¹⁹ TerreStar Reply Comments at 5-11 (stating all commercial spectrum leases for WMTS service would be non-exclusive and conditioned on the lessee coordinating its use with other WMTS lessees in the area to assure that each lessee could use the spectrum without interfering with other lessees). TerreStar, in subsequent *ex parte* filings, provided additional clarification of various issues, including spectrum leasing, the deployment timeline, and public interest benefits. See, e.g., Letter from Regina M. Keeney, Counsel for TerreStar Corp., to Marlene H. Dortch, Secretary, FCC, WT Docket No. 16-290, at 1-2 (filed Nov. 15, 2016); Letter from Regina M. Keeney, Counsel for TerreStar Corp., to Marlene H. Dortch, Secretary, FCC, WT Docket No. 16-290 (filed Sept. 20, 2017) (September 20, 2017 *Ex Parte* Letter). TerreStar has filed multiple *ex parte* letters in the docket memorializing similar discussions. See, e.g., Letter from Regina M. Keeney, Counsel for TerreStar Corp., to Marlene H. Dortch, Secretary, FCC, WT Docket No. 16-290 (filed Mar. 30, 2017); Letter from Regina M. Keeney, Counsel for TerreStar Corp., to Marlene H. Dortch, Secretary, FCC, WT Docket No. 16-290 (filed Apr. 4, 2017).

²⁰ Letter from Lawrence J. Movshin, Counsel for ASHE, to Amanda Huetinck, Mobility Division, WTB, FCC, WT Docket No. 16-290 (filed Nov. 10, 2016). Both ASHE and TerreStar have provided several other *ex parte* filings in this docket to reiterate their level of support for TerreStar's WMTS deployment business model. See, e.g., Letter from Timothy J. Cooney and Patrick R. Halley on behalf of ASHE, to Ajit Pai, Chairman, FCC, WT Docket No. 16-290 (filed July 14, 2017); Letter from Regina M. Keeney, Counsel for TerreStar Corp., to Marlene H. Dortch, Secretary, FCC, WT Docket No. 16-290 (filed Aug. 1, 2017). We also note that TerreStar filed a pleading styled as a supplemental comment outside of the pleading cycle established in the *TerreStar Public Notice*; we therefore treat it as an *ex parte* filing. See Supplemental Comments of TerreStar Corporation, WT Docket No. 16-290 (filed June 7, 2017) (reiterates TerreStar's arguments in support of its request).

²¹ See 47 CFR §§ 1.3, 1.925(b)(3), 1.946(e).

“(i) [t]he underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest,” or “(ii) in view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.”²²

7. As with other Commission rules, requests to waive a performance requirement must “meet a high hurdle at the starting gate.”²³ We note that the waiver standard must be applied in light of Section 309(j) of the Communications Act, which provides that the Commission shall include performance requirements to ensure intensive use of valuable spectrum and to prevent the stockpiling and warehousing of spectrum by licensees.²⁴ While each case must be determined in light of its specific circumstances, waivers of performance requirements are granted infrequently and are only appropriate when consistent with the statute and the public interest.²⁵ The Commission also may waive its rules for good cause shown under Section 1.3 of its rules.²⁶ Alternatively, the Commission may grant a licensee an extension of time pursuant to Section 1.946(e), but only “if the failure to commence service is due to causes beyond its control.”²⁷ We further observe that it is a licensee’s responsibility to exercise due diligence to confirm that it can satisfy performance requirements in advance of acquiring spectrum, a fact of which we routinely remind licensees prior to auctioning licenses.²⁸

8. As noted, Section 27.14(a) requires that each 1.4 GHz licensee demonstrate substantial service within the license term in order to avoid forfeiting the license. Accordingly, TerreStar must show that it is providing service that is “sound, favorable and substantially above a level of mediocre service which just might minimally warrant renewal” for each of its licenses by April 23, 2017.²⁹ As described below, for much of its license term, TerreStar failed consistently to put its spectrum to intensive use. It then chose, for years, to pursue a business strategy that it ultimately came to believe—but has not demonstrated—could not be implemented without causing interference to adjacent spectrum users. With only one year left before the deadline for meeting the performance requirement for its licenses, TerreStar abandoned that strategy and pursued an alternative business plan that entailed a different buildout approach. Based on the record before us, we are not persuaded that according TerreStar relief from its performance obligations—by grant of either a waiver or an extension—is warranted in the instant case.

9. TerreStar was on notice of the obligation to build out its markets by the end of its license terms and the technical requirements applicable to the 1.4 GHz Band before it acquired its licenses. As a general matter, it is a licensee’s responsibility to conduct adequate due diligence prior to acquisition of licenses: potential licensees are required to familiarize themselves with all applicable rules (including any technical restrictions) with respect to deployment of the relevant spectrum, to assure that they can timely construct as specified per service rules, and to confirm that the spectrum is suitable for the licensee’s business plans and needs. The Commission’s rules also generally do not contemplate waiving rules (including those involving deadlines) for types of considerations that licensees should take into account as part of this type of due diligence. Indeed, the Commission has repeatedly reminded prospective licensees

²² *Id.* § 1.925(b)(3)(i)-(ii).

²³ *WAIT Radio v. FCC*, 459 F.2d 1203, 1207 (D.C. Cir. 1972).

²⁴ *See* 47 U.S.C. § 309(j).

²⁵ *See WAIT Radio v. FCC*, 418 F.2d 1153, 1157 (D.C. Cir. 1969), *aff’d*, 459 F.2d 1203 (D.C. Cir. 1972), *cert. denied*, 93 S. Ct. 461 (1972).

²⁶ 47 CFR § 1.3.

²⁷ *Id.* § 1.946(e)(1).

²⁸ *See Auction of 1.4 GHz Band Licenses Scheduled for February 7, 2007*, Public Notice, 21 FCC Rcd 12393, 12405-06, paras. 31-40 (WTB 2006) (*1.4 GHz PN*).

²⁹ *See* 47 CFR § 27.14(a).

that each licensee has an obligation to conduct adequate research in order to assess whether it has the ability to fully comply with all applicable technical and legal requirements, and the wherewithal to shoulder the inherent risks of taking on the responsibilities of a licensee.³⁰ With respect to TerreStar's licenses specifically, the Bureau, upon establishing the auction bidding procedures for this spectrum in 2006, cautioned potential applicants that Commission rules as well as incumbent operations may affect how 1.4 GHz licensees use the spectrum, and directed bidders to become familiar with any applicable rules, orders, pending proceedings and incumbent operations prior to participating in the auction.³¹ The Bureau reminded potential bidders:

[T]hey are solely responsible for investigating and evaluating all technical and marketplace factors that may have a bearing on the value of the 1.4 GHz band licenses in this auction. The FCC makes no representations or warranties about the use of this spectrum for particular services. Applicants should be aware that an FCC auction represents an opportunity to become an FCC licensee in the 1.4 GHz band subject to certain conditions and regulations. An FCC auction does not constitute an endorsement by the FCC of any particular service, technology, or product, nor does an FCC license constitute a guarantee of business success. Applicants should perform their individual due diligence before proceeding as they would with any new business venture.³²

10. At no time has the Commission made ambiguous or unclear statements as to a 1.4 GHz licensee's obligations. In acquiring these licenses from the auction winners in 2007 and 2008, TerreStar was responsible for being fully cognizant of its responsibility to comply with all applicable service and technical requirements imposed in Part 27 and other Commission rules prior to acquiring its licenses, including the performance requirements and the consequences of failing to meet them. Given the Commission's findings that WMTS could be vulnerable to interference as well as the technical requirements aimed at mitigating risks to such operations,³³ TerreStar either was aware, or should have been aware, of the possibility that WMTS operations could affect TerreStar's deployment plans.³⁴ In conducting its due diligence, TerreStar therefore should have focused efforts on assessing such risks and developing strategies for addressing them, such as by performing technical analyses sufficiently early in the course of the license term to enable it to develop and implement—and modify if necessary—a buildout plan that could be accomplished within the applicable performance deadlines.³⁵

³⁰ See, e.g., *NTCH, Inc.*, Memorandum Opinion and Order, 28 FCC Rcd 16108, 16144, para. 19 (WTB ASAD 2013) (“Prior to an auction, we consistently advise bidders that they are solely responsible for conducting due diligence to investigate and evaluate all technical and marketplace factors that may bear upon their decision to bid upon a license being offered”); *Auction of Advanced Wireless Services (AWS-3) Licenses Scheduled for November 13, 2014; Notice and Filing Requirements, Reserve Prices, Minimum Opening Bids, Upfront Payments, and Other Procedures for Auction 97*, Public Notice, 29 FCC Rcd 8386, 8403-8404, paras. 46-48 (WTB 2014) (“As always, the burden is on the potential bidder to determine how much research to undertake, depending on specific facts and circumstances related to its interests”).

³¹ See *1.4 GHz PN*, 21 FCC Rcd at 12405-06, paras. 31-40.

³² *Id.* at 12405, para. 33 (emphasis in original removed).

³³ See *1.4 GHz Service Rules Order*, 17 FCC Rcd at 10034, para. 138; *id.* at 10054-55, paras. 205-208 (establishing field strength limits at the site of any WMTS operation); 47 CFR §§ 27.50(e)(1)-(2) and 27.804.

³⁴ In this regard, we observe that this situation differs from situations in which the Commission has found an adequate basis for broadly altering performance obligations. See, e.g., *Amendment of Part 27 of the Commission's Rules to Govern the Operation of Wireless Communications Services in the 2.3 GHz Band et al.*, Report and Order, 25 FCC Rcd 11710 (2010) (adopting revised technical rules and performance requirements for licensees in the 2.3 GHz band).

³⁵ Cf. *Requests for Waiver in the First Auction of Interactive Video and Data Service (IVDS) Licenses*, Memorandum Opinion and Order, 11 FCC Rcd 8211, 8217, para. 12 (1996) (due diligence efforts should include factoring in of equipment market and build-out considerations).

11. TerreStar argues that it requires additional time to construct due to the potential for harmful interference to adjacent band operations. Further, TerreStar argues that it could not have known of the sensitivity of WMTS equipment to interference until after it engaged in collaborative discussions with WMTS interests.³⁶ However, these arguments fail to account for the fact that interference to WMTS was a known concern that the Commission already addressed in 2002 in the *1.4 GHz Service Rules Order*. Specifically, the Commission recognized that interference to adjacent band WMTS may be difficult to control because of the license-by-rule nature of WMTS deployments (i.e., WMTS equipment has no set locus and operations may occur at various locations throughout a metropolitan area).³⁷ Accordingly, the Commission established rules to protect WMTS, i.e., more stringent power and field strength limits at the site of WMTS operations.³⁸ The Commission concluded that protecting WMTS operations from harmful interference and allowing adjacent band operations flexibility would be best achieved by defining the permissible field strengths that adjacent operations, including 1.4 GHz operations, must meet.³⁹ The Commission received no objections during the 1.4 GHz Band rulemaking proceeding with respect to these limits or to out-of-band emissions limits established for this spectrum band,⁴⁰ and TerreStar provides little support as to why these limits are now insufficient. The 1.4 GHz Band service rules provide for flexible uses and allow a licensee to determine what technology to use to provide service, but the licensee must comply with the technical and other service rules adopted to protect adjacent WMTS operation. It was TerreStar's obligation to construct its system in conformance to these rules (i.e., the more stringent power and field strength limits), and that obligation cannot be excused by delaying until the end of the license term and then claiming without any technical demonstration that the rules do not provide adequate protection to such adjacent services.

12. As noted, certain operating issues referenced in TerreStar's filings (such as the effect of out-of-band emissions from mobile units operating in close proximity to medical facilities) were raised in comments and accounted for in the rules adopted in the 1.4 GHz Band proceeding.⁴¹ It is not evident that TerreStar took sufficient steps to adjust its planned deployment and construct a system in light of these issues before deciding to abandon its business plan with less than one year remaining on its license term. We find it striking that TerreStar considered the possibility of setting commercial wireless exclusion zones around WMTS facilities⁴²—a solution that would have complied with the required field strength limits—but rejected it for business reasons. Further, while TerreStar also states that it sought a downlink-only wireless operation to avoid interference to WMTS and attempted in late 2014/early 2015 to acquire additional spectrum with which it could pair its 1.4 GHz spectrum,⁴³ we find that TerreStar should have recognized the need to address such technical issues earlier in its license term.

13. Similarly, TerreStar fails to provide any technical support beyond its own assertions that WiMAX system operations could disrupt the protected operations of other adjacent band entities, such as

³⁶ See September 20 *Ex Parte* Letter at 6.

³⁷ See *1.4 GHz Service Rules Order*, 17 FCC Rcd at 10034, para. 138.

³⁸ See note 3533*supra*.

³⁹ See *1.4 GHz Service Rules Order*, 17 FCC Rcd at 10054-10055, paras. 203-205.

⁴⁰ See *1.4 GHz Service Rules Order*, 17 FCC Rcd at 10031, paras. 126-128. We note that the restrictions adopted reflected comments filed by WMTS interests in that proceeding. See, e.g., Phillips Medical Systems Initial Comments, WT Docket No. 02-8 (filed Mar. 4, 2002) (Phillips WT Docket No. 02-8 Comments).

⁴¹ See e.g. September 20, 2017 *Ex Parte* Letter; Waiver Request, Exhibit B at 15. See also Phillips WT Docket No. 02-8 Comments at 5-6. As noted, the field strength limits adopted for this band addressed the concerns regarding 1.4 GHz operations in close proximity to medical facilities.

⁴² See September 20, 2017 *Ex Parte* Letter.

⁴³ See September 20, 2017 *Ex Parte* Letter at 7-8; TerreStar Supplemental Comments at 18-19.

federal aeronautical telemetry at 1435-1525 MHz, and federal radar operations at 1300-1390 MHz,⁴⁴ or how coordination requirements designed to help protect such operations are insufficient. The Commission considered impacts to other adjacent band uses and put in place coordination requirements to protect certain operations, such as co-primary federal incumbents, while determining that other adjacent band operations can be adequately accommodated by 1.4 GHz licensees on a case-by-case basis.⁴⁵ Likewise, TerreStar fails to demonstrate that its planned operation would cause interference to telemetry below 1432 MHz or that existing technical rules for 1.4 GHz are generally problematic with regard to such operations. It has failed to supply supporting technical analysis, or results from any actual efforts to construct its facilities in compliance with our rules, that demonstrates how coordination requirements designed to help protect such operations were proven to be insufficient. Accordingly, without a more definitive demonstration that harmful interference will occur from WiMAX or other deployments operating in compliance with our technical rules, we find no basis to conclude that execution of TerreStar's now-abandoned business plan was not feasible.

14. We also observe that TerreStar made limited progress with respect to putting its spectrum to productive use during the term of its licenses—making it that much more difficult to find that even with the benefit of a waiver, TerreStar would be able to ensure construction and use of its licenses as required by our rules. After it acquired its licenses in 2007 and 2008, TerreStar briefly sought to provide mobile coverage via a mixed terrestrial-satellite service in 2009 prior to filing for Chapter 11 bankruptcy a year later.⁴⁶ Once it emerged from bankruptcy, TerreStar then continued to hold all licenses in the 1.4 GHz Band without constructing any markets. While TerreStar did enter into two leasing arrangements, use of the spectrum by its lessees was limited in duration and market coverage.⁴⁷ Except for these arrangements, the spectrum was not put to use for the remainder of the license terms.⁴⁸ In lieu of actual buildout, TerreStar asserts that it spent the better part of two years late in its license terms in talks with the WMTS community about its concerns over the potential interference from WiMAX deployment as well as exploring the possibility of acquiring other spectrum. Finally, according to TerreStar, it was not until 2016 that it determined that allowing commercial medical telemetry operations would permit use of its 1.4 GHz spectrum without causing interference to adjacent band operations, and filed the instant request for additional time to enable WMTS operations on its spectrum.⁴⁹ It appears that, for a significant portion of TerreStar's license term, it made little effort to actually implement and deploy a service. As discussed above, TerreStar should have been aware of the technical rules and restrictions under which it acquired its spectrum, and should have been more proactive in resolving any potential issues and putting its spectrum into use earlier in its license terms. We find that its inactivity and lack of progress in pursuing buildout

⁴⁴ Further, the *1.4 GHz Service Rules Order* noted that while Radio Astronomy Service operations at 1350-1400 MHz are unprotected due to their secondary status, 1.4 GHz operators should be able to easily accommodate radioastronomy users given the small number and remote locations of observatories. *See 1.4 GHz Service Rules Order*, 17 FCC Rcd at 10038, para. 151. The Commission also noted that licensees are obligated under footnote US311 to make “every practicable effort to avoid causing interference.” *Id.*, citing 47 CFR § 2.106, n.US311.

⁴⁵ *See 1.4 GHz Service Rules Order*, 17 FCC Rcd at 10037-10045, paras. 147-177; *see, e.g.*, 47 CFR § 27.803(b).

⁴⁶ Waiver Request at 3-4.

⁴⁷ *See id.* at 5-6. The authorization of one of its lessees, One Dot Four Corp., was terminated in 2012 for non-payment. *See id.* The other lessee, FirstEnergy Service Company, was permitted to use spectrum for testing in two market areas, and its most recent leases expired in 2015. *See ULS L00010817-20* (authorization covers the A and B Blocks in EAG001 (Northeast) and EAG004 (Great Lakes); expired May 31, 2015).

⁴⁸ With respect to the lease with One Dot Four Corp., it is not clear the extent to which the spectrum was actually used to provide service in individual markets.

⁴⁹ *Id.* at 7.

during the lifespan of its licenses gave rise to TerreStar's present circumstances and its need for additional time to construct its licenses.⁵⁰

15. Based on the factual circumstances described above, we conclude that TerreStar has failed to demonstrate that there were unique or unusual circumstances that made application of Section 27.14(a) inequitable, unduly burdensome or contrary to the public interest.⁵¹ TerreStar was already subject to rules designed to protect WMTS and other adjacent band licensees regardless of the type of service it chose to deploy, and it failed to demonstrate that it would have caused interference if it operated in compliance with those rules, or that it was otherwise unable to develop a technical solution. TerreStar was also on notice of the power and field strength restrictions and coordination requirements in our rules, which were designed to protect WMTS and other adjacent band operations prior to acquiring its licenses. Further, our review of the record leads us to conclude that TerreStar's failure to develop and deploy a non-interfering solution in a timely manner resulted in the need to request the instant relief. We conclude therefore that TerreStar has failed to show that relief is warranted under Section 1.925(b)(3)(ii).

16. We are also not persuaded that relief should be granted for good cause shown pursuant to Section 1.3 of the Commission's rules.⁵² First, the Commission has found that "the material provisions" of the waiver standards under Section 1.925 and 1.3 are "virtually identical."⁵³ As noted above, we find that TerreStar has failed to meet its burden to justify a waiver under Section 1.925, and that reasoning applies equally to our determination under Section 1.3 of the rules. Second, and in any event, TerreStar has not demonstrated that there currently exists a shortage of WMTS spectrum capacity sufficient to warrant good cause to grant its extensive request for relief. In this regard, quite apart from the other inadequacies of TerreStar's waiver showing described above, we note that whether there is a need to devote additional spectrum to WMTS, particularly on a nationwide basis, is an open question,⁵⁴ and the record of this proceeding provides an insufficient basis on which to address that issue.

17. Lastly, TerreStar fails to demonstrate how circumstances outside its control prevented it from complying with its performance requirement. While Section 1.946(e) permits us to extend the construction deadline to enable the deployment of WMTS,⁵⁵ TerreStar does not provide support that the circumstances at issue here were indeed beyond its control.⁵⁶ As noted, TerreStar was on notice of the possible effects of adjacent band incumbency on 1.4 GHz operations, as well as the technical requirements with which it would be required to comply in order to accommodate the operations of incumbent licensees in those adjacent bands. From the outset, TerreStar was obligated to investigate all factors that might have a bearing on the licenses it sought, and to determine the viability of any planned

⁵⁰ See, e.g., *Advance Communication Corp.*, Memorandum Opinion and Order, 11 FCC Rcd 3399, 3414, para. 36 (1995) (finding that lack of significant progress toward construction was due to licensee's extended inaction and apparent lack of commitment to operating its own system); *Mr. Lee G. Petro*, Letter Order, 25 FCC Rcd 9046, 9050 (WTB ASAD 2010) (concluding that licensee's failure to take active steps at several points to confirm completion of payment constituted inaction that "indicates something well short of due diligence").

⁵¹ 47 CFR § 1.925(b)(3)(ii).

⁵² *Id.* § 1.3.

⁵³ See *Delta Radio Inc.*, Memorandum Opinion and Order, 18 FCC Rcd 16889, 16891, para. 7 (2003) (affirming Bureau-level waiver denial) (citing *BellSouth Corp. v. FCC*, 162 F.3d 1215, 1225 n.10 (D.C. Cir. 1999)).

⁵⁴ The Commission recently released a Public Notice seeking comment on a variety of issues related to broadband-enabled health care solutions, including future spectrum and wireless infrastructure needs. *FCC Seeks Comment and Data on Actions to Accelerate Adoption and Accessibility of Broadband-Enabled Health Care Solutions and Advanced Technologies*, Public Notice, 32 FCC Rcd 3660 (2017). In light of the ongoing proceeding, we decline to address the question of whether, as a general matter, WMTS operators require access to additional spectrum in the 1.4 GHz Band or other bands.

⁵⁵ 47 CFR § 1.946(e) ("[a]n extension request may be granted if a licensee shows that failure to meet a construction or coverage deadline is due to involuntary loss of site or other causes beyond its control").

⁵⁶ TerreStar Comments at 13, n.28.

service offering prior to acquiring those licenses. TerreStar's subsequent decision to move forward with the acquisition of its licenses, as well as its decisions regarding choice and deployment of service offerings in light of such factors, were all voluntary business strategies. It is well established that voluntary business decisions are not circumstances beyond the licensee's control within the meaning of Section 1.946 and, as such, do not constitute a valid basis for regulatory relief.⁵⁷

IV. CONCLUSION

18. Based on the totality of the factors presented by TerreStar, we decline to grant the Waiver Request. As a result, all of TerreStar's licenses automatically terminated due to TerreStar's failure to demonstrate substantial service by its April 23, 2017 performance deadline, pursuant to Sections 1.946(c) and 27.14(a) of the Commission's rules.⁵⁸

V. ORDERING CLAUSES

19. Accordingly, IT IS ORDERED that, pursuant to Sections 4(i) and 309(j) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 309(j), and Sections 1.3, 1.925(b)(3)(ii), 1.946(e), and 27.14(a) of the Commission's rules, 47 CFR §§ 1.3, 1.925(b)(3)(ii), 1.946(e), and 27.14(a), the requests filed by TerreStar Corporation for Temporary Waiver of Substantial Service Requirements, ULS File Nos. 0007375830-0007375893, filed August 12, 2016, ARE DENIED. Accordingly, all licenses listed in the Attachment to this Order TERMINATED AUTOMATICALLY AS OF April 23, 2017, pursuant to Section 1.946(c) of the Commission's Rules. 47 CFR 1.946(c).

20. This action is taken under delegated authority pursuant to Sections 0.131 and 0.331 of the Commission's rules, 47 CFR §§ 0.131, 0.331.

FEDERAL COMMUNICATIONS COMMISSION

Roger S. Noel
Chief, Mobility Division
Wireless Telecommunications Bureau

⁵⁷ See, e.g., *Thomas K. Kurian*, Letter Order, 32 FCC Rcd 6489 (WTB MD2017) (finding that request for extension of time to enable licensee to seek additional spectrum and conserve capital was a voluntary business decision that did not warrant relief); *PCS Partners, L.P.*, *Applications for Waiver and Limited Extension of Time*, Order on Reconsideration, 32 FCC Rcd 556, 561-62, para. 15 (WTB MD 2017), *apps. for review pending* (concluding that licensee's request for additional time to pair Location and Monitoring Service licenses with other spectrum held by licensee was a business decision); *Warren C. Havens*, *Applications for Waiver and/or Extension of the Five and Ten Year Construction Deadlines*; Order on Reconsideration, 29 FCC Rcd 1019, 1031, para. 28 (WTB MD 2014) (denying licensee's request for extension in order to pursue new equipment as a voluntary business decision); *Eldorado Communications, LLC*, *Request for a Waiver and Extension of the Broadband PCS Construction Requirements*, Order, 17 FCC Rcd 24613, 24616-17, paras. 7-8 (WTB CWD 2002) (concluding that decision to forego deployment of time division multiple access (TDMA) technology in favor of global system for mobile communications (GSM) technology was exercise of business judgment and within licensee's control).

⁵⁸ 47 CFR §§ 1.946(c), 27.14(a).

APPENDIX

Call Sign	File No.	Market	Spectrum Block
<u>1390-1392 MHz Licenses</u>			
WQGU891	0007375836	Boston	
WQGU892	0007375837	New York City	
WQGU893	0007375838	Buffalo	
WQGU894	0007375839	Philadelphia	
WQGU895	0007375840	Washington	
WQGU896	0007375841	Richmond	
WQGU897	0007375842	Charlotte-Greensboro-Greenville	
WQGU898	0007375843	Atlanta	
WQGU899	0007375844	Jacksonville	
WQGU900	0007375845	Tampa-St. Petersburg-Orlando	
WQGU901	0007375846	Miami	
WQGU902	0007375847	Pittsburgh	
WQGU903	0007375848	Cincinnati-Dayton	
WQGU904	0007375849	Columbus	
WQGU905	0007375850	Knoxville	
WQGU906	0007375851	Louisville-Lexington-Evansville	
WQGU907	0007375852	Birmingham	
WQGU908	0007375853	Nashville	
WQGU909	0007375854	Memphis-Jackson	
WQGU910	0007375855	New Orleans-Baton Rouge	
WQGU911	0007375856	St. Louis	
WQGU912	0007375857	Puerto Rico	
WQGU913	0007375858	Gulf of Mexico	
WQGU920	0007375865	Cleveland	
WQGU921	0007375866	Detroit	
WQGU922	0007375867	Milwaukee	
WQGU923	0007375868	Chicago	
WQGU924	0007375869	Indianapolis	
WQGU925	0007375870	Minneapolis-St. Paul	
WQGU926	0007375871	Des Moines-Quad Cities	
WQGU927	0007375872	Little Rock	
WQGU928	0007375873	Kansas City	
WQGU929	0007375874	Houston	
WQGU930	0007375875	Dallas-Fort Worth	
WQGU931	0007375876	Denver	
WQGU932	0007375877	Omaha	
WQGU933	0007375878	Wichita	
WQGU934	0007375879	Tulsa	
WQGU935	0007375880	Oklahoma City	
WQGU936	0007375881	San Antonio	
WQGU937	0007375882	El Paso-Albuquerque	
WQGU938	0007375883	Phoenix	
WQGU939	0007375884	Spokane-Billings	
WQGU940	0007375885	Salt Lake City	
WQGU941	0007375886	San Francisco-Oakland-San Jose	

Call Sign	File No.	Market	Spectrum Block
WQGU942	0007375887	Los Angeles-San Diego	
WQGU943	0007375888	Portland	
WQGU944	0007375889	Seattle	
WQGU945	0007375890	Alaska	
WQGU946	0007375891	Hawaii	
WQGU947	0007375892	Guam and the Northern Mariana	
WQGU948	0007375893	American Samoa	

1392-1395/1432-1435 MHz Licenses

WQGU885	0007375830	Northeast	A
WQGU886	0007375831	Northeast	B
WQGU887	0007375832	Mid-Atlantic	A
WQGU888	0007375833	Mid-Atlantic	B
WQGU889	0007375834	Southeast	A
WQGU890	0007375835	Southeast	B
WQGU914	0007375859	Great Lakes	A
WQGU915	0007375860	Great Lakes	B
WQGU916	0007375861	Central/Mountain	A
WQGU917	0007375862	Central/Mountain	B
WQGU918	0007375863	Pacific	A
WQGU919	0007375864	Pacific	B